

ART 34 AMDT

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CLAIMS

1. A method for producing blister copper, according to which method copper concentrate (5), flux (6) and oxygen-enriched air (7) are fed
5 together into a flash smelting furnace (1), so that there are created at least two molten phases, such as white metal (11) and slag (10) and the white metal is oxidized after the flash smelting furnace in at least one oxidizing reactor (12), **characterized** in that oxygen potential is within range $10^{-7} - 10^{-6}$ and sulfur dioxide partial pressure is within range 0.2 –
10 1 in the flash smelting furnace (1), and the oxidizing reactor (12) is installed in connection with the flash smelting furnace (1).
2. A method according to claim 1, **characterized** in that oxidizing reactor (12) is arranged to be installed in connection with the flash smelting
15 furnace (1) in a stationary fashion.
3. A method according to claim 1, **characterized** in that the oxidizing reactor (12) is connected to the flash smelting furnace (1) by a melt
20 launder (13).
4. A method according to claim 1 – 3, **characterized** in that the oxidizing reactor (12) is a surface blasting reactor.
5. A method according to claim 1 – 3, **characterized** in that the oxidizing
25 reactor (12) is an injection reactor.
6. A method according to claim 5, **characterized** in that into the oxidizing reactor (12), there also is injected solid white metal.

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7. A method according to claim 1, **characterized** in that the slag (10) is after the suspension smelting furnace (1) treated in an electric furnace in order to recover the copper content thereof.
- 5 8. A method according to claim 1, **characterized** in that the slag (10) is after the suspension smelting furnace (1) treated in flotation in order to recover the copper content thereof.

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